MORE THAN A SHELTER: A STUDY OF INDIGENOUS DWELLINGS AND CONTEMPORARY, AFFORDABLE HOUSING IN RURAL ALASKA

By

Esther Marcell Combs

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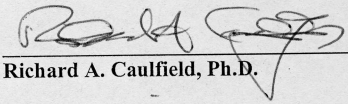

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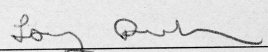

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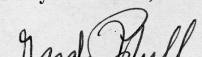

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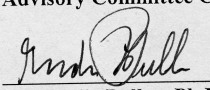

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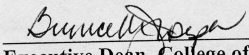

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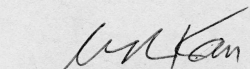

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MORE THAN A SHELTER: A STUDY OF INDIGENOUS DWELLINGS AND CONTEMPORARY, AFFORDABLE HOUSING IN RURAL ALASKA

A

THESIS

Presented to the Faculty

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MASTER OF ARTS

By

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ABSTRACT

The purpose of this study was to pursue an innovative idea to address the need for safe, affordable housing in the rural, subarctic area of the State of Alaska. A three-pronged approach for data gathering included an extensive historical review of early indigenous cultures and dwelling design; a review of the roles of federal and state governments and their impact on the political economy and lifestyles of rural indigenous people; and interviews of homeowners to obtain their comments, preferences, and suggestions for design features in a home.

The conclusions drawn from the findings indicated that the most important feature for a modern house in rural, subarctic Alaska is an enlarged Arctic entry way which was a feature of nearly all of the early indigenous dwellings albeit the simplistic, tunneled entry. Secondly, installation of a standby heat source or a backup, wood stove in homes; and, finally that planning, design and construction of a smaller, simplified house be pursued.

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ACKNOWLEDGEMENTS

I want to dedicate this work to my grandmother Ukgaikic Vasili of Bonisila who taught me when I was very young about the importance of learning the basics of life. She was an expert skin sewer of traditional furs and she made parkys, mitts and mukluks decorated with beautiful beadwork. I was only five years old but I had already knitted a very small scarf perhaps for my doll. My grandmother and grandfather Innoko Charlie had thirteen children; most died during the flu and diphtheria epidemics of the early 1900s. In spite of the hardships, my grandmother knew that I would need to be strong in life and so she imparted her spirit and strength that has sustained me through many trials. I have often wondered why the two survivors of her family were the only ones that could raise me: my auntie Mary Vasili Kieffer and my mother Lillian Vasili who physically was not able to care for me but imparted valuable ancestral knowledge to me. To them I give my thanks and gratitude for their love and prayers.

My family deserves a special thank you for putting up with me in the past two years while I researched this thesis topic. My husband Allen, who gave me the idea for it, also did a major part of our household cooking. My daughter Lisa, her husband Steven, and sons James and Joshua many times had to have family gatherings rescheduled by grandma.

Special thanks go to my advisors. Gordon Pullar whom I have had the pleasure to know and be associated within the Native community for many years. His enthusiasm about the RD Masters program and confidence in me that I could do it were vital to my

getting started. The encouragement of Larry Dickerson and Rick Caulfield helped me to hang in there through some bumpy times and to keep a sense of humor about it all. In the DANRD office Gail and Mary Ann were always helpful in spite of their own workload.

The Alaska Housing Finance Corporation, my employer, and the reason why I pursued the thesis topic always gave me their encouragement and support. From Dan Fauske, CEO; Bob Brean, Research & Rural Development Director; Teeny Metcalfe, Adminstrative Officer; and others who advised me on housing technology. A special thank you to Lucy Carlo in Fairbanks without whose help many parts of the study would have been more difficult and to my best friend Sarah who stood by me through it all.

And finally, to my fellow classmates who inspired my thinking and helped me to bring to the forefront that part of me, my culture, and to pursue learning about my ancestral history so I could pass that knowledge to my grandsons James and Joshua.

CHAPTER I

INTRODUCTION

Be true to your culture and like a cane it will help you walk.
Paul John, Traditional Chief of Toksook Bay

History and Background

This study has served a two-fold purpose in my life. The most obvious has been pursuit of the vital topic of housing in rural Alaska, but it has also served as an impetus for me to research my ancestral background that I have longed to do for many years. I chose the Ingalik, or Deg Hit'an as the people call themselves, as a focal point for historical research because Anvik, Shageluk, Bonasila, all communities located near the Innoko River, were the areas where my grandparents lived and raised their family.

In nearly two years I have located many out of print books by early explorers who gave first-hand accounts of the people, their culture and habitats. One was the Russian ethnographer Lieutenant Lavrentiy Zagoskin who traveled in the Yukon and Kuskokwin valleys in 1842-1844. Another was Englishman Frederick Whymper, an artist who traveled with an expedition to Russian America in 1862 and published his book *Territory of Alaska* in 1869, two years after Secretary William Seward's "regretful" purchase of Alaska (p.xi). Whymper has rendered beautiful drawings of their journey up the Yukon River one of which was a diagram of an Ingalik subterranean house.

Documentation of early indigenous dwellings serves as an important determinant, in addition to survival, to learn what life was like, what were these cultural practices and

beliefs of the northern Native Americans, and how those factors were interpreted into their dwelling design. An overview of early dwellings will be given to give the reader a broad view and background of architectural design, materials used, and descriptions of shelter uses tied to cultural practices.

The roles of federal and state governments will be explained and how social structure, the economy and lifestyles of indigenous people were impacted by regulations that were foreign to them. Contemporary rural housing development, initially substandard in the mid-1950s, has now evolved into quality, energy-efficient, affordable homes. The only problem has been the lack of funds to build the number of needed homes for rural Alaskans.

To gain a deeper understanding of the views and perceptions of rural community members that included Elders, single-parents, homeowners, and builders, a focus group was held in Fairbanks in early March 2003. The purpose was to inquire into the participants' beliefs, knowledge and attitudes about the design, construction, and other features that could lead to development of affordable, safe, and energy efficient, single family homes in rural, lower Yukon areas served by Interior Regional Housing Authority. The sessions were recorded and data collected was analyzed and put into the findings and recommendations.

The assumption of the researcher that the study would conclude with a recommendation that community planners and builders develop with the people a simplified, affordable home design would become a part of the framework of this study. It is anticipated that this design would meet the needs of the people without the burden of

extraneous costs that could be formidable in terms of length of mortgages for fixed incomes of Elder and single-parent families.

Statement of the Problem

In 1991, the Alaska Department of Community and Regional Affairs issued a statewide Housing Needs Study that incorporated the 1990 Census figures, and the 1988 Rural Housing Needs Assessment Study (that study excluded Anchorage, Fairbanks, Juneau, Sitka, Ketchikan, and all the military bases in the State). The report stated, "The single most important observation that can be made as a result of this statewide housing assessment is that a continuing, serious deficit exists with regard to low income, rural and Native Alaskan housing availability and condition" (p. 21). The special conditions in rural areas that added to the problem included, "...private sector or market mechanisms for housing do not function properly in rural Alaska where construction costs are high, transportation of materials difficult, and availability of skilled builders and developers scarce" (p. 21). The Housing Needs Assessment Study stated that 8,006 new rural houses were needed to replace substandard existing houses and to provide third or fourth generations with their own home. Furthermore, the Study noted that the Doyon Region (which includes Fairbanks and the Lower Yukon) needed 3,851 new houses to replace homes in poor condition and provide homes for third and fourth generations (p. 25).

In 1994, the Alaska Natives Commission Report made the following recommendation to the United States Congress:

> Federal regulations prohibiting local design and construction should be replaced. Furthermore, limits, construction standards, energy-related design criteria, and the multitude of policies and procedures that regulate construction standards in rural Alaska should be reviewed and revised by a panel composed mostly of Alaska Natives and others who have experience and expertise in arctic and sub-arctic housing construction (p. 19).

Research Questions

This study will address the following three research questions:

1. Determine if a simplified, affordable house design is practicable, cost effective or desirable to pursue in a selected community of the Lower Yukon region.
2. Determine if there are concepts in early indigenous dwellings that could be applied to contemporary housing construction in rural Alaska?
3. Determine if there are cultural considerations that could be included in home designs?

Researcher's Interest in the Study

My interest in housing was on the periphery for many years but it became serious five years ago when I joined the ranks of the Alaska Housing Finance Corporation. As manager of the Supplemental Housing Program I administered State of Alaska grants to housing non-profit corporations who served primarily rural areas. The grants were used

to supplement U.S. Department of Housing and Urban Development (HUD) funds for construction of single-family homes, multiplexes, and renovations that led to energy efficiency savings, improved water and sewer systems and electrical systems that conformed to code. A part of my job consisted of doing field monitoring visits. They included determining proper use of the funds, assessing quality of work, and gauging the satisfaction of homeowners or the community in general to the project. Previous experience related to this study included twenty years as a tribal programs and organizational administrator. Twelve of those years I served as Executive Director of the tribal non-profit organization Cook Inlet Tribal Council in Anchorage.

Since eighty percent of the housing authorities served Alaskans living in rural areas I was particularly interested in how the homes suited the lifestyles and cultures especially those of the indigenous people. Did these well-constructed, conventional homes meet the needs of the hunter/gatherer, to aid in the evisceration of game, and its preparation for storage whether it was freezing, canning, soaking in brine for drying and smoking, and so forth. Because of cost containment it was not always feasible to attach a garage or a utility/storage area to the houses where much of these activities could be conducted.

What features the people of rural areas deemed to be important in homes that would complement their lifestyles and be responsive to their living needs would need to be determined from community based research. From this emic perspective of the people the researcher would convey an interpretation that would include other data from home builders, designers, and technicians to present an etic view or outsider perspective.

Summary

The study began with a review of the literature on the ethnohistory of indigenous people living in the lower Yukon region of Alaska, specifically communities located nearby to the Innoko River. This area was chosen because the researcher's ancestral history is associated with the settlements and communities of that area. The roles of federal and state governments will be explained from the perspective of the researcher who has spent over twenty-five years of combined tribal programs and government housing grants administration to community development agencies in rural areas.

Interviews were conducted using the focus group format. The group setting was in Fairbanks and participants included Elders, single-parents, rural Alaska builders and representatives from the state housing finance agency. This data was collected, analyzed and formatted as a part of this study. Results of this research study with the recommendations will be made available to community developers and housing policy decision makers.

CHAPTER II

LITERATURE REVIEW

The Native American's attitudes toward this landscape have been formulated over a long period of time, a span that reaches back to the end of the Ice Age. This land, this land, is secure in his racial memory.
N. Scott Momaday, *The Man Made of Words*, 1998

Introduction

The review of literature was consistent with methods typical to qualitative, grounded theory studies to "establish the particular framework" (Rossman and Rallis, 1998) that will guide the researcher's understanding of the topic (p. 74). The review will describe the tradition and culture of Native Americans, which include Alaska Native people. An important point supported by relevant literature is that the indigenous peoples' views of dwelling design were inextricably tied to their traditional cultural values, beliefs, and practices.

Descriptions of traditional dwellings and shelters of indigenous cultures documented by ethnographers and anthropologists of the late 1800s and early 1900s will be presented. Impacts by explorers and settlers upon Alaska Native cultures and communities as well as epidemics caused major social changes and decimated indigenous populations.

In moving forward to the twentieth century it will be pointed out how the federal government policies, treaties, and legislation influenced, and in many instances, replaced or severely affected traditional government, education, and cultural practices. In the

latter part of the century tribal governments gained in power and strength through enabling Congressional legislation such as the Indian Self-Determination and Education Assistance Act , the Alaska Native Land Claims Settlement Act and the Native American Housing and Self-Determination Act. Nabokov and Easton (1989) reported that there are six factors that are paramount to interpret an Indian dwelling as in what that dwelling tells us of Indian life: "technology, climate, economics, social organization, religion and history" (p. 16). It is through examination of these factors that the reader will gain a better understanding of the evolvement of rural indigenous housing to where it is today.

Anthropological Overview of Alaska Native Cultures

According to Langdon (2002) Alaska's indigenous people, who are jointly called Alaska Natives, can be divided into six major groupings: Unangan/Aleut, Sugpiaq/Alutiiq (Pacific Eskimos), Yupiit (Bering Sea Eskimos), Inupiat (Northern Eskimos), Athabaskans (Interior Indians) and Tlingit and Haida (Southeast Coastal Indians). A short description of the language and territory, the environment, and culture will be given to provide an overview of the differences and similarities among the groups. For purposes of this study only winter houses or permanent dwellings will be emphasized and summer or temporary dwellings will be occasionally referenced.

Because the huge landmass of Alaska covers 533,000 square miles that is spread over 20 degrees of latitude, an explanation will be helpful to describe the climatic and geographic variations that determine design of regional dwelling structures. Langdon (2002) states there are four major environments that are labeled as zones:

Sitkan Zone – a temperate rain forest where stands of Sitka spruce, cedar and hemlock form towering and impenetrable forests. The climate is mild and damp due to the influence of the warm Japanese Current from the tropics. There is relatively little seasonal variation across the Gulf of Alaska with winter temperatures rarely falling below freezing and summer temperatures rarely rising above 60 degrees Fahrenheit.

Aleutian Zone – extends from central Kodiak Island to the tip of the Aleutians (including parts of the Alaska Peninsula), long grasses and shrubs are the major flora.

Arctic Zone – extends 200 miles around the western and northern coast of Alaska from Bristol Bay to the Canadian border. Cold winters and cool summers are characteristic with the northern regions experiencing a more intense winter cold than the southern regions. Tundra, composed of ground-hugging flora such as mosses, lichens, sedges and shrubs, with few or no trees, is found throughout the Arctic.

Interior Zone – lies south of the Brooks Range, north of the Alaska Range and east of the coastal strip of the Arctic environment. It is dominated by the Yukon River whose many tributaries drain the interior. Cold winters, with temperatures frequently below -50 degrees Fahrenheit are offset by short, hot summers with temperatures occasionally above 90 degrees Fahrenheit, thunderstorms and forest fires. The boreal forest, consisting of relatively small specimens of white and

black spruce, alder, birch and aspen, covers most of the rolling hills characteristic of interior terrain. (p.5, 6)

Tlingit and Haida

The Tlingit and Haida are coastal Indians that occupy the islands and mainland of southeast Alaska and are the northern most groups of the Northwest Coast cultural region according to Langdon (2002). Nabokov and Easton (1989) noted that the Tlingit nation consisted of about forty winter towns spread along the Alaskan panhandle and offshore islands. Each Tlingit town was divided into halves generally known as the Raven and Wolf sides with an Eagle division added in some northernly villages. The authors state that Tlingit towns ranged from one row of a few houses to 60 plank buildings clustered by clan and arranged in two rows paralleling the coast with each clan-lineage house displaying the crests associated with its house ancestor (Nabokov and Easton, 1989).

While membership in a clan was based on the mother's lineage, DeLaguna (1988) noted that the clan chiefs and their immediate families were the aristocrats and were careful to maintain their rank by marrying spouses of equal status. She continued with the following account:

> Of a lower rank than the aristocrats, who slept in partitionedrooms at the back of the plank house were the ill-defined commoners, their junior relatives, who slept on the side benches. Lowest of all were the no-accounts who slept with the slaves just inside the door. Slaves were those taken in war, and their descendants. As chattels, slaves were outside

> Tlingit society, to be bought, sold, killed, or freed at the whim of their masters. (p. 61)

DeLaguna (1988) also noted that the Tlingit man or woman owed patriotic loyalty to his or her clan, a duty that transcended marital ties and that wars or lawsuits were fought or prosecuted by clans, not by individuals or tribes.

The dwellings of the Tlingit and Haida were cedar plank houses as big as 40 by 60 feet with the standard size being 20 feet by 30 feet (Langdon, 2002). Typical homes had four large interior house posts with grooves on the top that seated the massive beams which extended from front to back. Overlapping planks were placed on top of the rafters with a smoke hole left in the center that also provided the only interior light. The interior included a central, excavated, rectangular area for a large single hearth with low-rising platforms along the walls that served as living quarters. Bark mats provided screening for privacy. Twenty to 30 people in four to six families occupied such houses. Characteristic of Tlingit, Haida and Tsimshian southeastern coastal Indian culture were the ornate carvings on their house posts and use of carved interior screens used to separate the chief's quarters and the communal part of the house (Nabokov and Easton, 1989).

Unangan/Aleut

According to Pullar (1997), the Russians first contact with Alaska Native people was in the Aleutian Islands with people who called themselves Unangan. Later the Russians referred to the Unangans as Aleut, a term that originated from the Koryak or

Chukchi languages of Siberia (Lantis, 1985, as quoted in Langdon, p.16). The people inhabited the Aleutian Islands as far east as Port Moller and were maritime hunters of the Bering Sea on north and the Pacific Ocean to the south. The Steller sea lion was not only the dietary mainstay but it also provided many products such as the hide for boat covers, sinew cords, bones for tools, stomach linings and gut for clothing and containers. Besides bottom fish like halibut other marine animals including otters, seals and whales were hunted. Other food such as bird eggs, plants, berries, and tidal organisms like clams and sea urchins were gathered by women and children.

Unangan houses were called barabaras. Barabaras (a Siberian term) were oblong pit dwellings with wooden or whale bone frames and rafters overlain by grass and sod (Nabokov and Easton, 1989). Windows were often translucent sealskin.

Revered Aleut leader Lillie McGarvey in 1979 wrote an account of life in a barabara as told to her by a good friend, John Goldof:

> The structure and design of the barabaras naturally fostered a close relationship among Aleut families. Each family unit occupied a niche within the barabara: the elders occupied one spot; parents and their married offspring occupied other sections; and in addition there were special niches for small children, for storage and for trash. According to John's friends, these dwellings uniformly wide—about 20 feet—but they varied in length from 20 to 50 feet. (p.144)

Garvey (1979) stated that the design of the barabara entrance efficiently kept out the elements and added to the comfort of its occupants:

> The entrances to Aleut homes found at archaeological sites required ladders, but in the later barabaras that John Goldof talked about the entrance to a house would be at the end of a long corridor that served to break the wind. The door of a house consisted of grass matting or skin flaps over an opening. Such a house was ideal for the setting, keeping occupants dry from the frequent rains, warm at all times, and snugly sheltered from the high winds peculiar to the area. The ground in the region does not freeze, so the mud floors were warm enough so that residents could go barefoot. These sturdy houses also withstood the numerous earthquakes that occur year-around in that locality. (p. 144)

The hardy, Unangan people fell victim to the combination of warfare, disease and starvation that wiped out entire villages followed by subjugation by the Russians in the late 1780s that effectively reduced the Unangan population to less than 3,600 from 18,000 at precontact level (Langdon, 2002).

Sugpiaq/Alutiiq

From the western part of the Kodiak Archipelago and along the forested Sitkan-type ecosystem through the lower Kenai Peninsula to Prince William South forms the homeland of the Sugpiaq-speaking people of the Yup'ik language group (Langdon, 2002). Langdon noted that the term "Alutiiq" was crafted using Sugpiaq word formation principles from the word "Aleut" and is the commonly used name for the people of this region. However, Pullar stated there is no translation for the word Alutiiq, while the

word Sugpiaq, translates to "a real person" (Clark 1984; Oleksa 1992 cited in Pullar, 1997).

There are three basic subdivisions of the Alutiiq: the Koniagmiut of the Kodiak Archipelago, the Chugachmiut of Prince William Sound, and Unergkurmiut of the south coast of the Kenai Peninsula and along Kachemak Bay (Langdon, 2002). Common regional references used for Koniagmiut is Koniag and Chugach for Chugachmiut. The Alutiiq, primarily the Koniag and Chugach people, were maritime hunters with highly ritualized practices for whaling, an inherited activity passed on from father to son. The rich setting of the sea and tidal areas provided a bounty for this hunter and gatherer society or as one Koniag leader Karl Armstrong (1979) stated, "When the tide goes out the table is set" (p.176).

The Koniag and Chugach lived in semi-subterranean houses that had entrances through a ground level door and were occupied by a large household number of approximately 20 persons (Crowell, 1988; Langdon, 2002). The basic floor plan as reported by Langdon consisted of four partially-buried wooden posts laid out in a square or rectangle buried in the floor about 10-12 feet apart. Inter-notched beams were cribbed upward to form the roof. Planks were laid along the side of the cribbing and across the roof, then covered with grass and sod. An opening served as the skylight and smoke hole was left in the middle of the roof that would be covered with a translucent piece of animal intestine.

This description was corroborated by Armstrong (1979) who referred to the dwellings as barabaras that were dug to a depth of three to six feet, covered over with

driftwood logs and covered in turn with soil and sod; lighting and heat were provided by a seal oil and wick lamp. He also elaborated on the larger communal structures of the kashim (meeting place) and the banya (steam bath) described as follows:

> The kashim was used for community activities of a usually formal nature—usually Koniag males. The banya was really the center of the community, less formal and more festive by nature. Used by the entire community without sex or age discrimination, it was the place where news and gossip was exchanged. No doubt here was where personal relationships were established and encouraged. (p.179)

Included in most Koniag houses was also a steam bath room as steaming provided for cleansing, spiritual purification, relaxation and socializing by the people (Langdon, 2002). In the middle of the dwelling was an open area with a hearth in the center that was the women's work area as well as the cooking area (Armstrong, 1979; Langdon, 2002). Some Koniag houses had storage pits near the walls that were covered with stone slabs. Smaller rooms for sleeping were carved out of the earth along the inside of the house. Some side rooms had earthen platforms covered with planks while others had planks inserted into the wall to form a ledge for sleeping. Small entryways connected the side rooms to the main room. At the opposite end of the house away from the entrance was the room typically occupied by the head couple of the household.

The Alutiiq population suffered under Russian rule and subjugation in the late 1700s when hostages were taken and Koniag males were required to hunt sea otters to supply pelts to the Russians. The Chugach Alutiiq moved to reoccupy their ancestral

villages around Prince William Sound and the lower Kenai Peninsula after coming under Russian subjugation when contacted by Baranov in 1792 and later after the transfer of Alaska to the United States, (Langdon, 2002).

Yupiit

One of the largest indigenous populated regions is the Central Yup'ik language group located in the Yukon-Kuskokwim Delta. The term Yupiit refers to the speakers of languages in the Yup'ik group of the Eska-Aleut language family that includes St. Lawrence Island and several communities on the Chukchi Peninsula across the Bering Strait, the Central Yup'ik speakers of the Bering Coast from Norton Sound south to the Alaska Peninsula and up to the Yukon, Kuskokwim and Nushagak Rivers (Langdon, 2002). Langdon also states that there are four dialects of Central Yup'ik; on Nunivak Island local people refer to themselves as Cup'ik to highlight their cultural and linguistic distinctiveness, and Alutiiq the third Yup'ik language spoken by the people of the Gulf of Alaska. VanStone (1984) reported nuclear families lived together in the same house thus forming an extended family household at fishing or hunting camps but in permanent villages the men and older boys lived in the kashim or community building while women and children lived in other dwellings. Oscar Kawagley (1995), in *A Yupiaq Worldview*, explained that the qasegiq (kashim), "was mainly the domain of men and boys prior to puberty....where storytelling, teaching of arts and crafts, tests of skill and strength, and learning of rituals and ceremonies took place" (p.21).

Men and women had very defined roles; the man was the provider, hunter and trapper; women cared for children, prepared food, made garments and observed taboos concerning menses and childbirth (VanStone, 1984; Kawagley, 1995).

VanStone (1984) reported that village life centered around the kashim since it was there that decisions concerning the whole village were made and ceremonial events took place. It was similar in construction to a house except that it was twice as large and had a cribbed roof. The tunnel was usually semi-subterranean with entry to the main room through a hole in the floor. An open area served as a fire pit when the kashim was used as a bathhouse and was closed when not in use.

The traditional houses as described by VanStone (1984) consisted of a small anteroom connected to a main living area by a short, ground-level passage or semi-subterranean tunnel. This tunnel prevented cold air from entering the living room as the entrance was covered with a woven grass mat or skin curtain.

In the following account Kawagley (1995) shows that cultural beliefs and practices were tied closely to the design of the house:

> The structure of the Yupiaq sod house has been likened to the woman's reproductive system. The ceiling's name in the Yupiaq language means "the above covering: a term which is now used to mean "heaven." The skylight is likened to the umbilical cord leading to the Ellam Yua,[1] the interior to the womb, and the tunnel-like entrance to the birth canal, or

[1] Kawagley (1995) defines Ellam Yua as the Spirit of the Universe (p. 31).

"the way to go out." In the old days, when a person died, he or she was never removed through the entranceway, however, but through the skylight. The body was lifted and passed through the opening to the place of interment. The act was very symbolic of the spirit's journey to the spiritual land. The body was then placed with knees to the chest and arms around the knees bound together a the wrists—a fetal position, perhaps signifying completion of the life cycle and readiness for reincarnation and renewal. The body was then covered with driftwood or rocks, or sometimes with wooden planks, a canoe or kayak overturned with the body inside. (p.20-21)

Connected houses were common on Nunivak Island (a Cup'ik-speaking area) described by Lee and Reinhardt (2003) as follows:

> Each house had its own tunnel doorway....the individual tunnels fed into a shared underground channel which connected all the houses to each other and to the qasgiq....for an entire community, then, there might be only one entryway into this complex....housefloors were as much as four to five feet deep, depending on the height of the walls. Rectangular in shape, the floor led to a tunnel cut into one of the narrow end-walls. A short pair of standing logs upheld another log lintel, which framed the doorway. A different source (Fienup-Riordan 2000:109) indicates that houses could have two entrances, one through the front wall (for summer) the other through a floor hole toward the front of the main room (for winter),

and both originating from a single tunnel to the outside. (p. 123-124)

VanStone (1984) found that semisubterranean houses in Hooper Bay (partly Cup'ik-speaking area) up the coast from Nunivak Island near the Yukon River outflow had roofs that were noticeably hipped but flat in the center. He also noted that storm sheds constructed with square frames made from drift logs protected the tunnel and main entrance from cold winds and afforded storage space for hunting equipment and household items. This would be similar to the Arctic entry ways of many rural houses today.

The external influences of the Russian American Company and the Russian Orthodox Church between 1818 and 1867 resulted in significant changes to the subsistence activities of the indigenous people. Most notably was the shift from these activities to more emphasis on fur trapping to trade the pelts for tools, beads, clothing and food at the local trading posts (VanStone, 1984). In the late 1800's the commercial salmon fishing industry developed in the Bristol Bay area that consisted mostly of Euro-Americans with a cannery work force provided by imported Asians and other outside laborers. VanStone (1984) indicated that it was not until after World War II that the indigenous people began to participate in the fishing industry.

Inupiat

The area and people of the Inupiat language area according to Lee and Reinhardt (2003) constitute the Northwest Arctic and the Bering Strait that extends westward to the Mackenzie Delta in Canada to the southeastern part of the Seward Peninsula in Alaska; it

also includes King Island and Big Diomede Island in the Bering Strait. They point out that the Western or Northwest Arctic area of Alaska has a seasonal supply of driftwood, a resource featured in their building structures that differs significantly from that of their Arctic Canadian neighbors to the east who used bone, snow, and stone in place of wood. The Bering Strait area according to Ray (1984) is mostly rolling and flat, treeless tundra with large stands of spruce and birch forests extending from Golovin to Unalakleet, however the islands are treeless and rocky.

Langdon (2002) reported that the Inupiat of Arctic, Bering Straits, King Island, Sledge Island and the Diomede Islands depended heavily on large marine mammals such as bowhead whales, beluga whales, bearded seals and walrus. Kotzebue and Norton Sound people harvested small sea mammals, land mammals such as caribou, fish and migratory fowl as well as pink and chum salmon.

Lee and Reinhardt (2003) described three types of turf-covered, semisubterranean winter house of the Inupiat: (1) cross-shaped dwellings of the Mackenzie Delta; (2) rectangular dwellings in the vicinity of Barrow and Point Hope; and (3) farther southwest, pole-or timber-built. The latter type is similar to the Koniag dwellings that were rectangular with a hearth, sleeping platforms and short tunnels and/or passageways.

There are a variety of dwellings of the Inupiat that may be best described by using a table to show particular features of dwellings in different regional areas. The North Alaska Coast Eskimo, or Tagiugmiut, of the Barrow area, the Interior North Alaska Houses of the Nunamiut (mountain-dwelling interior north) of the Point Hope area, and the Kobuk River houses are depicted below (Lee and Reinhardt, 2003).

Table 1: Features of Dwellings in Regional Areas

North Alaska Coast Eskimo Tagiugmiut, Barrow	Interior North Alaska Eskimo Nunamiut, Attasuk	Kobuk River Pole and Turf houses Noorvik, Noatak
Semisubterranean, rectangular main chamber, deeply dug entrance tunnel. Used hewn planks or split logs in central room, whale mandibles as storage rack posts, struts for tunnel rafters. 12 to 14 ft. long, 8 to 10 ft. wide, 5 to 7 ft. high.	Willow-pole framework on 4 heavier, forked uprights cut from spruce trees. Sloping roof of long poles stretched between lower and upper stringers. Short surface passage for storage space. Entire structure sheathed with turf or frozen moss.	Semisubterranean main chamber and descending tunnel overlaid with turf, then moss or earth. Built over frozen ground, thawed spots with fire, then dug holes with spruce logs to make a house pit 3 to 5 ft deep.
Roof had 2 ft. square skylight on south facing side made of whale membrane or seal gut.	Square gut skylight (bearded seal traded from the coast) covered middle of flat roof.	Installed 4 center posts and 4 corner posts that shouldered stringers. Had square skylight in roof, sod covering
Sleeping platforms 30" high, 4 to 5 ft. wide, space underneath it used for storage or for extra guests.	No platform but slept on shallowly excavated floor paved with rocks, spread with moss and willows.	Willow boughs and caribou fur on floor surface. Size of dwelling 16 ft. wide, 11 ft. long (tunnels 9 ft long).
Had separate kitchen area at right angle to tunnel where women cooked and used jar shaped pottery vessels. Used wood in kitchen hearths.	Occupants cooked over an open hearth in the floor which provided heat at night after skylight was closed.	Fire hearth in center. Cooked using heated stones in birch bark or bent spruce wood containers to boil food.
Heat, light from large, semi lunar lamp basins 4-1/2 ft. long of carved soapstone.	Size was about 18 ft. long and 10 ft. wide.	Pottery or sandstone lamps, 6 to 8" across, shallow basins, edge supported wick.

Other regional dwellings include the wooden houses of Kotzebue Sound and the Seward Peninsula that were similar in design and materials to the North Alaska Coast houses. Lee and Reinhardt (2003) point out distinguishing features of a floor hole (a trap door leading to an underground tunnel) in the Kotzebue Sound house, and the Cape Nome house that had a large, high-walled anteroom at the tunnel entrance, which the occupants entered by a ladder or notched log. One of the most interesting dwelling designs was the Bering Strait Islands stone pit-houses of King Island and Big and Little

Diomede Islands. A traditional leader of King Island with whom I had the privilege to work in the late 1970s, Paul Tiulana (1987), wrote in his autobiography, *A Place for Winter*, "Our Eskimo name for King Island is Ooq-vok which means 'place for winter'....it is a rocky place and steep. We build our houses on stilts because there was no flat place on the sides of the island" (p. 9).

According to Senungetuk and Tiulana (1987), the population of King Island was nearly 200 people as reported by Jesuit explorer Father Bernard Hubbard when he lived on King Island in 1938 and 1939. The population steadily dwindled as families moved to Nome for health services and education for their children when the Bureau of Indian Affairs closed the school on King Island. Tiulana (1987) noted that the Bureau of Indian Affairs encouraged the King Islanders to relocate using many excuses such as the one he related, "They told the King Islanders, 'there's a big rock on top of the village. Experts say it is going to come down any time and the school and some of the houses are in its path.' The rock is still up there. It never rolled down" (p. 39). The last of its people moved to Nome in 1969 and the island has remained abandoned since then.

Three sides of King Island was a mass of granite rising sheer hundreds of feet straight up from the Bering Sea with the fourth side that provided an area for about fifty houses. Lee and Reinhardt (2003) reported both King Island and the Diomede Islands have a scarcity of sod. House pits were excavated from the hillside rocks and were shored up with a wood frame but the exterior walls were of stone and insulated with granite fragments and earth. Entrance was through a square-framed doorway where one ascended a long, arched stone tunnel that had an anteroom for storage, and arrived at the

residential chamber through a floor hole. Roofs were flat and often pitched downward to prevent snow buildup and a skylight of whale-liver membrane was built into the roof.

Currently, there has been a controversy over whether to move the community of Little Diomede reported by Hage (2002) who interviewed the leadership of the Native Village of Diomede, some residents (population 150) and the head of the Bering Straits Regional Housing Authority. While Inupiat people have lived on Little Diomede for thousands of years, Ray (1984) noted that the first Europeon to go ashore was Russian Cossack, Ivan Kobelev, in 1779 and who later mapped out the Seward Peninsula. Housing is one of the biggest problems along with lack of a central water system (water is hauled to homes) and no sewage system (honey buckets or individual containers are used and dumped at a site). Hage (2002) states that families of 12 live in two-room, plywood homes among 50 box-shaped houses crowding the village, with a dozen that are either abandoned or uninhabitable. The relocation issue is still unsettled even after a council vote of 21-14 against it but according to Eric Iyapana, President of the Native Village of Diomede, who stated that, "The unofficial vote of the community was 'yes'," in reference to his door-to-door inquiry but it would be a moot point unless funding is found (Hage, 2002, p.46).

Athabaskans

Athabaskan Indians occupy the broad interior of Alaska between the Brooks Range on the north and the Alaska Range on the south as well as the Copper and Susitna river valleys (Langdon, 2002). According to Langdon (2002) the only Athabaskan

groups to live by the ocean were the Dena'ina who resided along the shores of Cook Inlet. For purposes of this study only the groups who inhabit the Yukon and Kuskokwim river basins: the language groups of Ingalik, Koyukon and Tanana will be discussed, however, other Athabaskan groups may be referenced.

In reference to the names of the Athabaskan groups, VanStone (1974) stated, "While such names as Ingalik, Kutchin, Dogrib, or Slave had no social reality to the people involved, the subdivisions had not only territorial and possibly linguistic significance," (p. 43), as a result ethnographers, anthropologists and other scholars use the name Ingalik to refer to Indian people living in a defined area of the Yukon and Kuskokwim rivers. Snow (1981) noted that the name Ingalik first appeared as Russian Inkality in Andrei Glazunov's 1834 journal and the term was subsequently used by Russian explorer Lieutenant Lavrentiy Zagoskin in his travels among the Indians of the Lower Koyukon area in 1843 to 1844. In current usage the people do not call themselves Ingalik, an often derogatory term but instead use Deg Hit'an or "people from here" (James M. Kari, communication to editors of the Handbook of North American Indians, 1978). Other than direct quotes, the name Deg Hit'an will be used when referring this particular group of people in this study.

Among the riverine Athabaskans fishing was the primary subsistence activity along with hunting moose, caribou, bear and other subarctic animals. Use of nets, dip nets, and fish traps were some of the common harvest methods. Fish caught during the summer months were dried and stored in caches for dog food as well as for use by the people throughout the winter.

VanStone (1974) reported that, "Among every Athapaskan[2] group, the pattern of shelter reflected not only the subsistence activities characteristic of particular times of the year, but also climatic variations" (p. 32). He described the Upper Tanana semipermanent winter house as circular with a frame of long, curved poles, the lower ends were stuck in the snow and the upper ends did not come together at the top to leave a smoke hole. These poles were lashed to two horizontal poles to create an inner curve to the structure. The frame was covered with sewn moose hides or caribou skins. It was about fourteen feet in diameter, eight feet high and its construction made it easy to move from one location to another.

While the portability of a dwelling was an important feature, the people of the lower Yukon and Kuskokwim were considered more "sedentary" and their culture was "influenced in a number of ways by Eskimos" with whom they lived in close proximity (VanStone, 1974, p. 35). In her early research, DeLaguna (1947) noted that the four-post roof support design was a feature of the winter houses of the Eskimos from Bristol Bay to the Yukon and extended as well to houses of the Siberian Koryak, Kamchadal, and Gilyak.

An example of one of the three types of winter houses was given in the following early account in *Territory of Alaska* by English author and explorer Frederick Whymper (1869) who described a Deg Hit'an winter dwelling:

> October 28, 1866. On the left bank were a few under-ground

[2] Merriam-Webster's Dictionary tenth edition (2001) lists four different spellings of this language that are: Athabascan, Athapaskan, Athabaskan and Athapascan. In this thesis Athabaskan will be used except when quoting VanStone who uses the Athapaskan spelling.

houses, intended for winter use. These were simply square holes in the ground, roofed in, and earthed over. The entrance of each was always a rude shanty of logs or planks, passing into which we found a hole in the ground, the entrance to a subterranean passage. Into this we dropped, and crawled on our hands and knees into the room. "Amilka", the owner of one of these houses, put half his floor at our disposal, and we cleared it of dirt and encumbrances, and spread our skins over it. A part of us stopped there some days, studying the manners and customs of the people. (p. 175)

VanStone (1974) more specifically described the winter houses of Deg Hit'an as being sixteen feet long and slightly less wide and constructing it began as follows:

> As a first step in construction, an excavation was made to a depth of approximately three and half feet. The house roof was supported by two pairs of posts set in a parallel position against the front and back walls. Beams were stretched from front to rear between these posts. Slanting roof poles were placed all the around the structure so as to extend from the ground surface about a foot and a half to two feet from the edge of the excavation to the horizontal beams. The horizontal poles were laid across the front-to-rear beams, and the narrow central section on the roof completed by putting the final roof poles in place leaving a smoke hole opening. The whole roof and sides were then covered with sod and grass. When no fire was burning, the smoke hole was covered. There was a roofed entryway about six feet in length at ground level and steps led to the door, which was

covered with a grass mat. Inside there were benches on three sides constructed of spruce poles. (p. 35-36)

The Deg Hit'an also built winter houses that were constructed along the lines of the one just described except they were larger, approximately 35 feet by 25 feet, which was used as the ceremonial house or kashim. Like the nearby Eskimos, the kashim served as a sleeping and work room for the men and a place to take sweat baths.

Summer houses were constructed in traditional locations or fish camps. They were above ground, rectangular with pitched roofs and walls of vertically-placed spruce plants, spruce bask, or birch bark strips. VanStone (1974) noted that some of these structures were very sturdy and were used for successive summers by the owners which is in contrast to the observation made by Whymper (1869) who stated, "Indian summer dwellings—simply wooden shanties, built above ground, with a small doorway, sometimes circular, and a hole in the roof to let out the smoke" (p. 175).

The dwellings of the Tanaina Indians of the Cook Inlet-Susitna River basin area, who were considered more sedentary than the Deg Hit'an, constructed a large winter house with several sleeping rooms and an attached bathhouse (VanStone, 1974). The houses resembled those of the Upper Tanana described earlier with a significant feature of those built in the Kachemak Bay area having no smoke hole as fires were built outside of the structure.

The winter dwellings of the Copper River basin Ahtna Indians consisted of a rectangular bark house similar to the Upper Tanana structures that were occupied until

February at which time the people moved to the headwaters of the Copper River to construct temporary summer dwellings (VanStone, 1974).

The Deg Hit'an had their first outside contact with Russian explorers who established a trading station along the Kuskokwim River at the mouth of Holitna River in the winter of 1832-1833 (Snow, 1981). As a result of this and succeeding contacts, the great smallpox epidemic occurred in 1838-1839 killing many people in this area. This event enraged the Kuskokwim Natives who blamed the Russians for the epidemic and subsequently the Natives destroyed the post at Ikogmiut or Russian Mission and its occupants (Osgood, 1970). This attack did not deter other Russian explorers and in 1842-1844 Lieutenant Lavrentiy Zagoskin entered the Lower Yukon and Kuskokwim areas from their trading post in Fort St. Michael. Contemporary ethnographers of this geographical area rely on the accuracy of data recorded by Zagoskin who kept very detailed journals of his travels among the people. An example follows that is a description of a Native dance (he has already given a detailed description of the shaman's role and dress of the men and women) in a kashim of a village in the Yukon and Kuskokwim area (Michael, 1956/1967):

> The kazhim is 10 sazhens square. The people sit on all three tiers of benches and on the floor except for the front side, which is left free for the performers. The men occupy the benches; some are without their parkas, some altogether naked. The women, many of them nursing babies, crowd together on the floor. It is hot and stifling. Two oil lamps on the "proscenium," that is, in the corners of the front side of the fire

> pit, and four additional ones in different parts of the kazhim throw a dim light on the motley crowd of spectators. There are grass mats hanging from the front edge of the lowest benches and they separate the actors' dressing-room. Four shamans are sitting on this bench holding drums 2-1/2 feet in diameter in their teeth. Two old men in tattered parkas and with smeared faces appear on the stage from time to time, tease each other and make fun of the spectators, saying the latter in vain have come together hoping to see the new dance which they themselves, the old men, stole from the man who made it up. This is in place of an overture. (p. 227)

The impact of the religious groups on the Deg Hit'an was significant. Initially, the Russians sought to baptize Native people into the Orthodox faith in the early 1800s. In 1885, the Moravians founded their mission near Aniak; in 1887, the Roman Catholics founded a mission at Nulato; and in the same year the Episcopalians established a mission at Anvik. With the influx of the churches, boarding schools were established and Osgood (1970) noted that, "the effect on the Ingalik was considerable, until today practically all the Indians are members of a Christian church" (p. 44). In the 1900s the great increase in the non-Native population did not immediately affect the Deg Hit'an people because of their geographical remoteness but many of the indigenous people died from the influenza epidemic of 1900 and the diphtheria and whooping cough epidemics of 1904.

Summary of the Cultures

It has been shown that all of the groups of Alaska Native people have been in existence for thousands of years and have lived successfully in the harshest conditions on earth. Each group brought forth knowledge, techniques, and development of natural resources that are useful today in spite of the fact we live in a highly, technically developed age. We are finding out that all of us need to learn basic, survival skills because we cannot forever rely on having electricity for heat and to run our basic systems; especially in Alaska where we also live in an earthquake zone. In the past three years city governments, major employers, and schools have implemented training to teach basic survival skills, skills of which our indigenous people were masters.

Of all the events, perhaps the most deleterious to the people has been the influence of the mission schools that prohibited use of indigenous languages and traditional ways with the intent to force the children to adopt another culture foreign to them. As a result, generations of Native people have experienced cultural alienation, fragmented and dysfunctional families and to again become victims to other kinds of epidemics of alcohol and drug abuse, poverty, and substandard living conditions. It is a challenging time but we are making slow progress. The next section discusses the impact of Federal and State regulations on the people and communities particularly in political and economic ways and the evolution of housing in rural areas. The people have accepted the challenges before them and it will be shown how they have assumed those responsibilities and the leadership roles.

Government Regulations and Traditional Tribal Governments

The history of the federal government's involvement in Alaska as the administrator and provider of services to Alaska Natives is extensive. For the purposes of this study the focus will be on policies that affect Alaska Native self-determination and self-governance and the extension of that authority to housing issues.

The movement toward self-determination for Indians, which began during the Kennedy administration, was a reversal of earlier policies that were more subtly driven by "termination" policies (Alaska Native Commission Report, 1994). In 1974, during the Nixon administration the United States Congress passed Public Law 93-638, the Indian Self-Determination and Education Assistance Act, which was signed into law on January 4, 1975. The Act was subsequently amended by Public Law 100-472 which broadened the tribes' contracting authority for services and programs administered by the federal government. The definition of a tribe has been greatly expanded under the Alaska Native Claims Settlement Act of 1972 which includes the twelve existing regional nonprofit organizations, thirteen regional for-profit corporations as well over 200 traditional villages.

Each of the twelve regional areas in Alaska has established an Indian housing authority (IHA) or organization under State of Alaska regulations that is empowered to contract with United States Department of Housing and Urban Development (HUD) and other federal or state programs. The cumbersome and outdated HUD development regulations were overhauled by a joint federal-tribal task force in the early 1990's which resulted in the Native American Housing Assistance and Seld-Determination Act

(NAHASDA) of 1996 with subsequent amendments in 1998 and 2000. The centerpiece of this legislation was enabling the tribes or tribally designated housing entities (TDHE's) to receive all of the funds allocated for their area through a block grant. This meant Indian housing authorities and TDHE's would need to develop an initial five-year housing plan and thereafter submit an annual updated plan along with a budget to HUD. The Indian Housing Plan (IHP) under the new NAHASDA regulations allowed for an expanded community development approach in addition to building or renovating existing housing. Some of the other activities included drug awareness and prevention programs and a variety of community centers depending on the needs of each locality.

As mentioned previously my work with the Alaska Housing Finance Corporation (AHFC) included administering State of Alaska grants to regional housing authorities and performing field monitoring visits to determine the proper use of funds, assess the quality of work and gauge the satisfaction of homeowners and/or the community with the project. The housing authorities respond to the people with greatest needs for new housing or for renovations of existing houses. Elders and single-parents are usually the highest priority but also those who live in substandard, unsafe and unsanitary housing are targeted. The latter are usually living in houses that were constructed with HUD funds by inexperienced or unscrupulous builders in the 1950s to the 1980s. They are expensive to heat because they have insufficient insulation in the walls, floor and ceiling; and they have poor ventilation so that condensation builds up behind the walls or water leaks in around the windows resulting in mold growth that is extremely hazardous to the health of the occupants (Combs, 2001).

Tribal governments today have the authority to contract for virtually any program formerly administered by the federal government and to enhance and improve the quality of life for their people and others in the rural community. Contracting for State programs and services also applies as the State realizes that it is more cost effective to contract out a program to an entity that has the experience to administer it as well as first hand knowledge of the problems and the most viable solutions. The main drawback has been insufficient federal funding whether it is for housing, health, education or social service programs. It has become a political issue and tribal governments, from the small traditional governments to large regional Native corporations, have acquired the sophistication and expertise to deal effectively with the challenges before them.

Rural Housing Development

The fourteen rural housing authorities in the State have developed the administrative, program, and technical expertise to administer millions of dollars of HUD funds, develop financing packages, and deal in all aspects of housing planning and development for their communities. In the past five years there have been state of the art single and multi-family homes built as well as senior housing that in some instances incorporate cultural considerations. Some of these include banyas or steambath rooms, food preparation areas that can accommodate preparation of large game animals for potlucks or special ceremonies, and activity rooms large enough for performances by traditional dance groups whose younger members can learn particular cultural practices or knowledge from the Elders.

The regional housing authorities are constantly evaluating their construction activities, work performance and the impact they have on the communities served. In the past year, the majority of the 14 authorities have met to discuss ways to construct a home that would meet the building energy efficiency standards (BEES) of the State and yet be a simplified, less expensive model that would not strap persons on a fixed income such as Elders and single parents to 30-year mortgages. It is a proposal that will be addressed in more detail later in this study.

The State housing supplemental program was established in the 1980s to provide additional funding to enhance HUD housing construction dollars for rural areas. The additional grant funded up to 20 percent of the total HUD development cost per dwelling. The four categories in which it could be used were energy efficiency design features (including quality windows, doors, and additional insulation), water and sewer systems, access roads, and electrical distribution to the housing. The State grant in many cases allowed for the construction of two or three more houses for the housing deprived rural areas. Housing authorities must factor into their budgets higher shipping costs for construction materials; for example, a shipment of materials from Seattle to Barrow costs nearly four times more than shipping it to Anchorage (Alaska Housing Finance Corporation [AHFC], 2002).

Conclusion

It has been shown that the development of the earliest dwellings by the resilient and resourceful indigenous people was accomplished under the harshest climatic conditions. Those characteristics along with their inner strength and perseverance have

contributed to their survival through all the adversities that can befall humanity. We still have challenging situations and problems; they are just a different set in a different time; but we have gained in stature and ingenuity to adapt ourselves to work successfully in political and economic systems to improve life for our future generations.

Chapter III

METHODOLOGY

...developers need to understand Native people and their ways so that the modern homes would meet their needs.
Single parent participant, Fairbanks.

Introduction

The study began with a review of the literature on the ethnohistory of all the indigenous people of the language groups according the Alaska Native Language Center map of the University of Alaska Fairbanks. More emphasis was centered on the people living in the lower Yukon region of Alaska, specifically communities located nearby to the Innoko River. This area was chosen because the researcher's ancestral history is associated with the settlements and communities of that area. The roles of federal and state governments were explained from the perspective of the researcher who has spent over 25 years in the fields of tribal organization management and administration of government housing grants to communities in rural and urban areas.

Research Questions

This study will address the following three research questions:

1. Determine if a simplified, affordable house design is practicable, cost effective or desirable to pursue in a selected community of the Lower Yukon region.
2. Determine if there are concepts in early indigenous dwellings that could be applied to contemporary housing construction in rural Alaska?

3. Determine if there are cultural considerations that could be included in home designs?

Research Design

Rossman and Rallis (1998) noted that qualitative studies tend to be designed with at least some open-ended features. The genre of this study was to complete a comprehensive review of the features of early indigenous dwellings and to explore the policies that influenced the issues to set the framework. The "concept of culture...focuses attention on widely shared and deeply held beliefs extant in a cultural group" (Rossman and Rallis, 1998, p. 175), consequently as researcher I factored in those concepts into the interview process. An important observation is the researcher's own views of the social world and relationship with the participants and community. Linda Tuhiwai Smith, author of *Decolonizing Methodologies* (1999), discusses a researcher's relationship as an insider or outsider to the community and that both types share critical thinking about their processes but, "the major difference is that insiders have to live with consequences of their processes on a day-to-day basis" (p. 137). In this study the researcher is aware of the levels of reflexivity between her and the participants, that is, the effect the researcher has on the participants and conversely, their effect on the researcher. While this qualitative study is more in the "interpretivist paradigm," (Rossman and Rallis, 1998, p. 35), or where the researcher attempts to understand the social world as it is from the perspective of her experience, there is also an attempt to balance that view with use of accepted social science practices for data gathering.

As pointed out earlier, the researcher is related to the community in a broad sense both ethnically and through a work relationship. Smith (1999) pointed out that insider researchers need to build "support structures...to work with such an existing governing body to establish a purpose-developed support group...to bring together outside academic or organizational people...the community and the researcher" (p. 139). While the foundation was in place to develop the interview structure, it would not have been possible without the assistance of one person in Fairbanks who was truly an insider to the community whose family were tradition bearers with members strategically situated at the upper social levels of both the Native and non-Native communities. Larry Dickerson, author of *Creating Healthy Communities* (2002), stated, "Residents of a community know it best. Trusting in that is a key to successfully working in a community. Every community has its own ways" (p. 117).

Data Collection

The focus group interview method was used to gather data about the participant's "views and experiences, their feelings, perceptions, beliefs, knowledge, and attitude" (Community Ventures, 1995, p. 1) concerning features the people of rural areas deemed to be important in homes that would complement their lifestyles and be responsive to their living needs. The participants selected represented Elder Alaska Native people, who were homeowners, a single parent who was a recent homeowner, the construction and finance representatives of the regional housing authority, and representatives of the State housing finance agency.

A knowledgeable and skilled group facilitator who was familiar with the topic and the Alaska Native culture was selected to do the group interviews. The focus group was held in a neutral meeting place at the University of Alaska Fairbanks, Cooperative Extension Service conference room from 10:00 AM to 12 Noon. Transportation assistance was provided, refreshments and a short visiting time beforehand was held for the participants to become acquainted. The people were asked to sign a consent form (see Appendix A). Also an honorarium of 25 dollars was given to each one in a discrete manner during the visiting time. Each person also was given a written question meant to get their thoughts focused on housing issues (see Appendix B). As meeting coordinator and researcher I opened the meeting, welcomed the people, performed introductions, and stated the format and purpose of the meeting. I also stated that any references to their comments would be used anonymously in my study. Thereafter the facilitator began following the oral questions format (only he and I had a copy). (See Appendix C for an example.) One person who assisted in setting up the meeting and recruited the participants operated the video recorder at the back of the room. I also recorded notes on the laptop computer and was available to clarify any questions or to make any changes to the meeting format. At the conclusion of the interviews, everyone was thanked and we visited for a short while before everyone left.

Categories and Elements of Focus Group Interviews

Interview of Participants

The responses to the ten questions were carefully reviewed to identify themes or topics that seem to recur. Key words and phrases were noted. The result was sorting and grouping of the responses into three main categories. They were:

A. Design Features (Questions 1, 4, 5, and 6)

B. Home Systems (Questions 3 and 4)

C. Cultural and Other Needs (Questions 2, 7, 8, 9 and 10)

Within each category an element or elements were listed that reflected the question asked of the participants.

Category A: Design Features

Element

- **Important Feature in Home Design** (Question 1)

An Elder participant said having a backup or standby heat source like a wood stove was important should there be an electrical power failure. Everyone seemed to agree that was the main desired feature. Another feature that nearly all agreed to was reducing their fuel costs through small measures such as not using the water spray feature on the kitchen because when it is used they noticed that the boiler turns on. The same was true if they used the dishwasher and the Elders stated they prefer not to use it since it is an item they considered nonessential to their living needs. The Elders also said they prefer to take

baths rather than use the shower, again for water conservation so the boiler would not turn on. Other comments by the Elders included installation of hand rails in the bathroom and having the home built on one level so there would no need for stairs. There was discussion about the Heat Recovery Ventilation (HRV) system in the newly constructed homes. One of construction representatives from the housing authority had to define what an HRV was and it appeared that only one homeowner from Fort Yukon had this system (a young, single-parent) and she thought it met their needs but it required expensive electrical power to operate.

Element

- **Window Size** (Question 4)

The consensus was smaller windows were preferred as long they allowed for safety egress especially in bedrooms. One Elder said she did not like large windows because they radiated too much cold air in the winter. The construction representative from the housing authority stated they received windows in a housing package from Canada that met the egress requirements but his crew replaced the sliding windows with crank open ones. The reason was that snow and ice would build up on the sliding windows outside and then they would not open which was a safety concern for egress. One Elder said that sometimes plastic or Visqueen was placed over the outside windows to reduce heat loss but she said it was a safety concern should egress be necessary.

Element

- **House Size** (Questions 5 and 6)

Questions 5 and 6 were combined because of their relationship to each other. The question was not written clearly and seemed to cause some confusion among the participants on how to answer it so we proceeded to the next question that was a follow up to it. The majority agreed that a smaller house with simplified systems would be desirable since they all had grown up in small houses that had the basic essentials. One Elder said she hears statements like, "I want my kid to have his or her own bedroom." She said she and her three sisters always shared the same bed when they were growing up and no one suffered ill effects from it. The same Elder who was originally from Minto said if one room new houses were going to be built there she would be in favor of it but they would have to have bathrooms (she said they were spoiled, everyone laughed).

There was continuing discussion on house size and everyone agreed that it was up to the villages to determine the size of the houses for their community. The construction representative from the housing authority said they are looking at developing a smaller, simpler version of a house to cut down on fuel use and costs. He said this was being done with technical assistance from the Cold Climate Research Center in Fairbanks and the idea was to build a warm, comfortable home for a small family or those desiring a scaled down house. He pointed out that it would not have a boiler (furnace) but instead a Moniter heater with a catalytic wood heater or an efficient wood stove.

Arctic entry rooms (or storm sheds) were brought up by an Elder who said they were essential to have in an Arctic climate. The construction representative said that it would be more efficient and less costly to put the entry room at the end of the house instead of in the front or side because it would fall under the existing roof overhang. Also, the first truss on the Arctic entry way can be easily attached to the outside wall.

There was more discussion on building simplified houses, in some cases, log houses as one Elder related was being done in Northway and they had new outhouses as well (there followed some outhouse stories and laughter).

Category B: Home Systems

Element

- **Modern Heat/Ventilation Systems or Basic Heating Appliances** (Question 3)

  The general consensus seemed to be that the new Heat Recovery Ventilation (HRV) systems were noisy and generated a lot of air movement which felt cold to the Elders. One of the construction personnel from the housing authority clarified about the different ventilating fan systems but it seemed like the Elders did not care for any fans and even mentioned about the fan in the range hood causing cold air to come in the room. There was also discussion that HRV systems in newly constructed houses in villages such as Ruby are being turned off by the homeowners because they cause a lot

of air movement in the house and they use a lot of expensive electricity. Question 4, Window systems, was also listed under this category as it is viewed as a system in homes but it will not be discussed any further since it was fully covered in Category A.

Category C: Cultural, Other Needs

Element

- **Modern Single Family Homes and Rural Needs** (Question 2)

All seemed to agree that the features of a modern home were desirable only if the homeowners or occupants received a thorough orientation on all the systems and how to operate them. One of the Elders said people in her age group often do not know about the new systems because no one explains what they do. She said in multi-housing complexes often Elders cannot cook the Native foods because of the smells bothering other tenants and that should be taken into consideration by the builders. The young, single parent said that developers need to understand Native people and their ways so that the modern homes would meet their needs. This would apply to each locality because Native needs and cultures would vary. She said she personally has developed a system for energy conservation in her new home in Fort Yukon to keep the utility costs down. For example, she monitors her teenagers' shower time and constantly asks them to turn off the lights when they leave a room. She said she had some orientation but had to pay people to tell her about other systems such as having

the furnace man come over and explain the need for an annual maintenance checkup. One of the Elders said they bought their home through Neighborhood Housing and they received a full orientation. Another Elder said that when they bought their used house a short time later they had to replace a lot of appliances. The construction representative said that housing authorities should buy quality, energy efficient appliances so that they will last longer and be less costly to operate.

Element

- **Cultural Considerations** (Question 7)

Most of the discussion centered on the value of Arctic entry ways. The construction representative said if it was eight feet by eight feet, and had the door set off to one side so that there would be more usable space for a freezer, a bench, stacking wood, traps and so forth, and it would better serve the homeowner.

There was other discussion related to Arctic entry ways such as some villagers using the entry ways to store garbage and the dogs getting into it or putting odds and ends out there like a moose leg so it can also be a messy area. Nevertheless everyone agreed that this entry way was essential to the home. One person asked about having a bigger sink to clean game or fish in but there was not a response. One Elder mentioned that her mother used to tan a moose hide in their

house when she was growing up and how the smoke would permeate their clothes (everyone laughed along with her).

Element

- **Single Feature** (Question 8)

The response to a single feature was the desired smoke house that the Elders missed in their present home location in Fairbanks. One of them said if they had enough room in their backyard he would have one there. In response to the suggestion about a steam house, there did not seem to be any indication it was needed or desired as a cultural feature although it was mentioned that the recovery program in Minto had one.

Element

- **Other Needs** (Question 9, 10)

The concluding questions concerned any other comments or ideas. The young, single-parent said more assistance is needed to teach people about saving energy costs like changing light bulbs and turning off the lights and appliances such as the television when leaving a room. One Elder said they keep their temperature down but she knows of other Elders that keep it in the 80 degree range. She also said long ago people used to build their houses on the ground but now they put them on posts which she thought must be difficult to keep warm. The construction representative explained that in many areas it is necessary

because of the permafrost to put the houses on posts so there would not be any melting occurring that could damage the foundation. He also said the floors are well-insulated and cold air does not penetrate the house from below. One Elder said that while the villages have a lot of housing needs and concerns the housing authority should not forget those who live in Fairbanks or the urban areas and that they have housing needs or need to have repairs done. One final comment from a housing authority representative concerned having to pay Davis-Bacon Wages or the prevailing wages for construction projects and that this severely affects their ability to have enough funds to build more houses or to renovate existing houses. She suggested that if the housing authority could negotiate to pay less than prevailing wages that they would be able to better serve the people and employ more workers as well.

Chapter IV

RESULTS

Introduction

In undertaking this study I was motivated to pursue an innovative approach to solve, at least in part, the lack of safe, affordable housing in the rural, subarctic area of the State. Redefining and scaling down a home design to enhance energy efficiency is not a new idea in the last two decades particularly as planners and builders deal with ways to reduce utility costs of consumers by building tighter, quality houses. I was encouraged when I became aware of efforts already underway by several housing authorities to explore a house design that would not only be smaller and energy efficient, but would be appealing to certain segments of the population on fixed incomes that want these features but not the 30-year mortgage that comes with most modern homes.

The quest to investigate this topic led to development of three research questions to frame the study:

1. Determine if a simplified, affordable house design is practicable, cost effective or desirable to pursue in a selected community of the Lower Yukon region.
2. Determine if there are concepts in early indigenous dwellings that could be applied to contemporary housing construction in rural Alaska?
3. Determine if there are cultural considerations that could be included in home designs?

The following sections of this chapter will show the results of data collection, literature review, and data gathered from other sources that respond to the research questions.

Data Collection Experience

In tracking the data collection process the focus will be on the most recently completed interviews of participants that was held in Fairbanks. The participants numbered thirteen including the facilitator and included selection of people who would be vocal and freely present their ideas and comments. There were four Alaska Native Elders who were married couples living now in Fairbanks but have close ties to their communities of origin, that is, Tanana and Minto. The single parent (originally two were planned to attend) was a Native women in her mid-thirties who has teenage and pre-teen children and lives in Fort Yukon. She is purchasing a four-bedroom home from the regional housing authority that was completed in 2001. I have personally completed an inspection of the homes as State grant funds were used along with HUD funds.

There were four construction department representatives from the Interior Regional Housing Authority in Fairbanks. Among the men representatives was a woman construction finance/budget manager who has been with the organization for many years. Out of the four, one was an Alaska Native.

The three State government employees included an Alaska Native woman who has worked for several years in rural housing research in Fairbanks, a male who has worked in the same field for over twenty years and myself. As mentioned earlier, the

facilitator was an Alaska Native male who was skilled in this task and is a leader in the Alaska Native community.

The video tape of the session has been carefully reviewed. The most outstanding feature was the relaxed atmosphere, the free discussions that occurred before the meeting, during the meeting including the break time and after the meeting. None of the participants were hesitant speakers. At times the facilitator had his job cut out for him when he truly needed to jump in to get the discussion back to the question at hand or to have one person speak at a time. It was a pleasure to be involved in this session that was confined to two hours as recommended by the focus group guidance material (Community Ventures, 1995).

Categories and Elements of the Interviews: Key Results

As shown in the previous chapter, the data was reviewed, formatted and placed into three main categories with elements identified in each category. They are listed below with key results noted at the end of each category:

Category A: Design Features

Elements:

- **Important Feature in Home Design** (Question 1)
- **Window Size** (Question 4)
- **House Size** (Questions 5 and 6)

Key Results:

- **Back up or Standby Wood Stove**—the participants agreed that in an Arctic climate this was an essential system because of unexpected electrical power failure or even running out of fuel oil if used.
- **Reduce Utility Costs**—the Elders were concerned about the boiler (furnace) turning on when they used water in excess to their needs such as the spray hose feature on sinks and or the dishwasher.
- **Railings and Single Levels**—the Elders stated that they would like to have a rail installed in bathrooms as a safety feature and single level homes without stairs for handicap or convenience of Elders and others desiring that feature.
- **Smaller Windows With Egress**—There was consensus for smaller windows as large windows for views or design were not important to the participants. All agreed that windows in bedrooms or those specifically placed in strategic areas of the house should have an egress design for safety reasons.
- **Smaller, Simplified House Design**—Elders stated a preference for this type of house as they all grew up small houses although it should have water and sewer facilities, and be warm and safe. It should have a Monitor heater along with an efficient wood stove.

- **Arctic Entry Ways**—This was viewed as essential to home construction in rural areas. Its placement should be at the end of the house for easy attachment and the door should be offset to create more room for a storage area, benches, or for placement of a freezer.

Category B: Home Systems

Element:

- **Modern Heat Recovery/Ventilation (HRV) Systems or Basic Heating Appliances** (Questions 3 and 10)

Key Results:

- **HRV Systems**—There was little support for this system except by one person who said the system worked fine but consumed a lot of electricity, an expensive item in rural areas. The Elders did not like the noise of an HRV, did not understand its function, and did not like movement of cooler air when it was turned on. Window was also in this category as it is regarded as a system but it was covered in Category A.

Category C: Cultural, Other Needs

Elements:

- **Modern Single Family Homes and Rural Needs** (Question 2)

- **Cultural Considerations** (Question 7)
- **Single Feature** (Question 8)
- **Other Needs** (Questions 9 and 10)

Key Results:

- **Orientation**—All agreed that features of a modern home were useful only if the occupant received an orientation from a technical person on how to operate the systems and maintain them. This especially was important for Elders who may not be familiar with new appliances and home systems.
- **Energy Efficiency**—Home occupants should receive an orientation on how to conserve energy uses to reduce their utility costs such as turning off lights, reducing water usage and so forth.
- **Quality Appliances**—Housing authorities should purchase energy efficient, quality appliances whenever possible so that replacement time is extended to several years.
- **Arctic Entry Way**—This was again discussed under Cultural Considerations as an essential part of the house.
- **Single Feature**—The Elders believed a smokehouse was a very desired feature but as much as they wanted one they conceded it was up to the home occupant to build one not the housing authority.

- **Urban Concerns**—Elders agreed that while there are many housing needs in the villages that the housing needs of Native people living an urban area should not be forgotten such as house repairs or renovation.
- **Davis-Bacon Wages**—There was a concern about having to pay the prevailing wages for construction as it cuts into the housing construction budget reducing the amount of funds available to build more homes or employ more people.

Application of Concepts from Early Dwellings

The extensive literature review in Chapter II presented the cultural highlights of the main indigenous cultures of Alaska along with an overview of their early dwellings.

One of the primary features of the dwellings of the Arctic and subarctic was the tunnel or partly tunneled entry way that would reduce the effects of cold air from the outside going into the main living areas. This concept has been carried over in housing construction since the early 1900s in cold climates through the addition of Arctic entry ways or storm sheds. They are used in this era for the same reasons including storage of traps, outdoor clothing, and frozen food storage.

Another feature was the skylight and/or smoke hole as an exhaust for fires in the hearth and for daylight entry into the dwelling when using animal gut as a cover. Obviously, today we have skylights in our modern homes purely for aesthetic reasons since they have been known to leak moisture into a building along with breaking the

thermal barrier causing heat loss. However, creating enough natural light is important in a home in Alaska during the seven or more dark months of winter although the participants interviewed did not opt for larger, picture windows but only large enough for safety egress.

A predominant feature of many early dwellings in nearly all the instances except southeast Alaska was the semisubterranean winter house. That feature has provided an impetus for many modern day studies of underground houses such as that of author Rob Roy in his book, *Underground Houses* (1994), who made the following statement:

> Underground (also known as "earth-shelter") housing is a broad subject. In the late 1970s and early 1980s, there was a national mini-craze about underground housing, probably in response to heightened awareness of energy conservation. (p. 5)

While there are many advantages and disadvantages about these types of houses that is a topic outside of this study. For several years studies of building science in cold climates has been multi-team effort of the Alaska Cooperative Extension Service, the construction industry, the Alaska Housing Finance Corporation and the United States Department of Energy. The result has been publication of procedural manuals for the construction industry and ordinary homebuilders that prescribe tested materials for the various geographical areas and climates in Alaska. It is interesting to note that the statements made in the publication, *Alaska Housing Manual* (2000), parallel that of the participants:

> An appropriately designed energy-efficient building will not only have lower heating bills, but it will last longer, because the same practices that prevent heat loss also prevent moisture from migrating into the walls and causing damage. The same building will be more comfortable during its lifetime, because it will not be drafty, will not have cold floors, and can be heated to comfortable temperature with reasonable cost...the cost of fuel in rural Alaska can be two to four times higher than in urban areas...this makes energy efficient-buildings even more important. (p. 3)

The Canadians have a counterpart team involving indigenous community developers, the Canadian Mortgage and Housing Corporation (CMHC), researchers, and the construction industry that have applied cutting edge technology to housing issues in rural areas. Two years ago I attended the Circumpolar Housing Forum in Yellowknife, Northwest Territories, Canada. The forum centered on development of innovative building technologies to create improved infrastructures for rural residents. Some of the topics presented by the First Nations community and housing developers, who were indigenous people, were improved water and wastewater systems, sewage treatment, foundations, and building well-ventilated, tight homes in the Arctic climate. An example was the Healthy House System that treated wastewater to a degree that it could be used for all non-potable uses such as to flush toilets and to wash clothes. There were five prototypes installed in Yellowknife and two in Nunavut villages where water has been hauled in and sewage hauled away not unlike that of the Arctic villages in Alaska. About two years ago the Research and Development Department of AHFC sponsored a Cold

Climate Housing Conference in Anchorage and many of the Canadian First Nations presenters were on the agenda. Such a conference provided an excellent opportunity for interaction between the rural developers of Alaska and those of the Canadian Arctic.

Affordable, Simplified Housing Design

In January 2003, while meeting with the developers at the Interior Regional Housing Authority, the topic of development of an affordable, simplified house came up. The leaders of the discussion were Carl Hoffman, Construction Manager and Pete Williams, Capital Improvements Project Director, who stated that there was a group of developers from other housing authorities that had been meeting over the past year to explore design of such a house with the Cold Climate Research Center in Fairbanks. The Association of Alaska Housing Authorities whose members are nearly all of the fourteen housing authorities had formed a task group under the guidance of President Blake Kazama (also Executive Director of the Tlingit-Haida Regional Housing Authority) to proceed with the research and design. They described the house as a standardized, one-design, energy efficient, with one to three small bedrooms. It would have a Monitor heater along with an energy efficient, wood stove such as a Blaze King in place of a heat recovery ventilation (HRV) system which is expensive and increases electrical use costs for rural homeowners. The target group for the homes would be those on fixed incomes such as Elders or single-parents who do not want or perhaps may not qualify for a 30-year mortgage.

As noted in the participants' focus group this proposed house design is becoming a reality and the housing authority may begin building it this year. Certainly the people interviewed were supportive of this design.

Cultural Considerations

It was surprising to find out that cultural considerations, other than the Arctic entry way, were not an important factor in a home; however, interviews in other areas of the State may bear different results. This is considered as a gap in the study that will be discussed in the last chapter.

Chapter V

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The data collected that resulted in an analysis and recommendation for this study came from three primary sources. The first was an extensive research of indigenous cultural groups and dwellings to form a basis for the history and evolution of housing in rural Alaska. The second was a review of the roles of federal and state governments and their impact on the political economy and lifestyles of rural indigenous people. The third area of data collection came from interviews of selected participants representing different segments of the community to gain their responses to questions on creation of comfortable, affordable housing for rural Alaskans.

In Chapter I, there were three research questions stated to frame this study that were:

1. Determine if a simplified, affordable house design is practicable, cost effective or desirable to pursue in a selected community of the Lower Yukon region.
2. Determine if there are concepts in early indigenous dwellings that could be applied to contemporary housing construction in rural Alaska?
3. Determine if there are cultural considerations that could be included in home designs?

The data collected from the participants in part supports the desirability to own a simplified, affordable house; however, the task group of the Association of Alaska Housing Authorities is still researching the design practicability and cost effectiveness with the Cold Climate Research Center. If the housing authority decides to pursue construction of this type of house it will likely be in one of the Lower Yukon villages but at this time that is not a certainty.

The application of certain concepts of early indigenous housing such as the Arctic entry way and aspects of semisubterranean design have been applied to modern homes as stated in the previous chapter.

The results of the data gathered from the participants concerning cultural considerations in housing design and features indicate that this is not important item to be included at this time. However, this is probably a gap in data collection in this study that is covered under Recommendations for Future Research.

Recommendations

The following are recommendations of the researcher based on the results of this study:

1. The research and design of an affordable, simplified, smaller house should continue to be pursued by the housing authority developers. A pilot project in one or more locations in the subarctic areas of the State would be a feasible testing location to measure energy efficiency data, monitor fuel and other utility costs. The families should be part of the

study to determine their satisfaction or dissatisfaction, and to receive other feedback and comments.

2. Homeowners or housing occupants should receive an orientation about the systems and appliances in their modern homes so that they know how to operate and maintain them.
3. Alternatives to the heat recovery ventilation (HRV) system should be explored and installed on a trial basis to determine their effectiveness and to gain feedback and comments from the home occupants.
4. Quality, energy efficient appliances should be purchased by housing authorities whenever possible to extend the replacement period and reduce repair costs.
5. Housing authorities should review the policies on Davis-Bacon Wages on construction projects and determine the best alternative to establish fair wages for their workers and to create additional jobs or build additional houses through their cost savings.

Recommendations for Future Research

The following are recommendations for future research related to affordable, simplified housing in rural areas:

1. The involvement of people in the design and development of houses is an important issue that came out of the participant interviews. This group interview was only the tip of iceberg and yet the people selected were

enthusiastic, almost excited, to be involved that was very noticeable in person and on the video tape. It would not only be an excellent source of consumer input but the ancillary benefit would be better relationships with the community and those who might be recipients of a new house or a retrofitted one. People like to be asked about their opinion, and they feel good about contributing to an important issue.

2. This could be considered the second part of the previous recommendation and that is to implement some of the comments and suggestions received. While it is not always possible because of budget or other constraints to include much of the input received, some can be for little cost and time. An example would be setting up a formal process for orientation of new housing or new systems to home occupants. This could even be accomplished by community members hired on an as-needed basis. It could be a win-win situation.
3. Other areas of the state should incorporate a system for feedback from the people in rural areas on housing issues. While there continues to be a critical need in housing, it is believed that often people can understand that there are budgetary limitations but they would be willing to support a design effort that might result in more houses in the future. By extending the inquiry to other areas of the state, comments on issues of that locality can be reviewed and evaluated for usefulness and incorporation into the housing design plan. As it was pointed out earlier in the review of the

indigenous cultures, a wide diversity exists among the people concerning the importance of culture and how it is represented in their lives, homes and community. The question is important and should be asked of the people.

Conclusion

While many social, health, and economic problems exist that Alaska Native people endure today, there have been advancements in the areas of self-sufficiency and self-determination through the political and legislative processes established by tribes and tribal entities such as the regional housing authorities. It has been shown in the chapter on the roles of the Federal and State governments that major reforms in legislation in recent years have provided new opportunities along with the authority for tribes and their entities to contract for programs and services heretofore administered by the Federal government. As a result there have been innovative, cost-effective programs with tangible benefits afforded to Native people that far-surpass the predecessor government-operated, entitlement programs.

In the years 1990 to 1999, there were 4,242 modern, energy efficient houses built or renovated that involved nearly $10.0 million dollars of State Supplemental Housing Program funds, this amounted to 20 percent of the Federal HUD or NAHASDA development costs for each project (AHFC, Supplemental Housing Program, 2003). It has been challenging for the housing authorities to achieve this number, yet it is only the tip of the iceberg with the demand for safe, affordable housing in rural areas far

exceeding the supply. Housing authorities consult with the leadership of the villages they serve and include them in the planning and design process to the greatest extent possible. Budgets are pared to include only absolute necessities in the house and as if that were not enough, they strive to meet local training and hire goals to the greatest degree. It is not a perfect picture. One housing director told me it was a constant balancing act of working within the confines of a stringent budget and striving to meet the demands of the village council for local hire. So the recommendations of this study were not made frivolously or in a vacuum; it has been understood that all is being done that is monetarily possible within the existing constraints. The recommendations are based on the findings in this study and with the notion that all social programs including the one in which the researcher is involved can be improved to better meet the needs of the people. This "can do" attitude can best be summed up when recently a co-manager was told that her workload would double but she would not be receiving any extra assistance nor would she receive any salary increase. Her response, made with all earnestness was, "Oh good, that means more job security!" So I conclude that with the demands before us, we will all have job security for a long time to come.

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APPENDIX A

CONSENT FORM

Consent Form

I, _____, voluntarily agree to take part in the focus group discussion to share my ideas on what features I believe are important to include in building a home or any other comments I may have related to housing whether it is in an urban or rural area of Alaska. Any comments of mine may be referenced but only anonymously without use of my name. I understand the purpose of the group is to gain an understanding from the people on what he or she would like to see included in the construction of their own home and that this information would be used in a Master's thesis and be made available to housing planners and developers.

_____

Participant

Date: March 6, 2003

Focus Group Discussion organized by Esther M. Combs
Located in the CES conference room on March 6, 2003
Fairbanks, Alaska

APPENDIX B

Written Question for Participants Before Start of Group Session

Getting Started…

Creating Comfortable, Affordable Housing for Alaskans

List three things you would like to have or change in your present home or a new home that would make it more comfortable or convenient for your lifestyle?

1._____

2._____

3._____

APPENDIX C

ORAL QUESTIONS FOR FOCUS GROUP

Questions for the Focus Group on Creating Comfortable, Affordable Housing for Alaskans

1. a. What do you think is the most important feature you would like to have in a home? Or maybe you have more than one?
   b. Why is that important?

2. Do you feel the single-family homes being built today meet the needs of people living in rural areas? If not, why?

3. The basic systems in a home like heating and ventilation have changed over the years from single stoves to built-in systems that ventilate automatically to change the indoor air every so often. Are you comfortable with these newer systems or would you like the advantages of having a stove that provides a central heat source in a room and can also be used to heat water or keep a pot of beans or stew cooking all day?

4. How do you feel about bigger windows to give you a better view of the outside as opposed to the smaller windows in earlier homes?

5. What do you think should be done to build houses that are still well insulated and well constructed (energy efficient) but that do not strap you down to a 30-year mortgage?

6. Are you willing to live in a smaller house, with smaller windows, with simplified heating such as a wood or oil-burning stove and a modern appliance stove for cooking?

7. What considerations would you like to see in a house that would help you to live your particular lifestyle such as subsistence fishing and hunting, preparation of pelts and sewing garments?

8. If you could bring one feature from the house or its related structures such as smoke houses or banias (steam houses) what would it be? Why?

9. What other ideas do you have related to this housing topic?

10. Is there anything we missed today related to this that you would like to bring up?